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EXAMINER

ZHANG, SHIRLEY X

ART UNIT	PAPER NUMBER
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4121

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/762,994	Applicant(s) OGURA, MASAOKI	
	Examiner SHIRLEY X. ZHANG	Art Unit 4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/09/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-3, 12-25, and 34-36 have been amended.

Claims 1-44 are now pending.

Response to Amendment

Applicant's amendments filed 12/11/2007 necessitated the new ground(s) of rejection presented in this Office action.

Applicant's arguments with respect to claims 23-26, 33-37 and 44 rejected under 35 U.S.C. 102, and claims 1-22, 27-32, 38 and 43 rejected under 35. U.S.C. 103 have been considered but are not persuasive in view of the new ground(s) of rejection.

Accordingly, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

1. **Objections to the drawings and abstract** are withdrawn after the examiner has carefully considered applicant's amendments.
2. **Section 101 rejections of claims 12 to 22** are withdrawn after the examiner has carefully considered applicant's amendments to the claims.
3. **Section 112 rejections of claims 33 to 44** are withdrawn after the examiner has carefully considered applicant's amendments to the claims.
4. **Section 102 rejections of claims 23-26, 33-37 and 44 are maintained.** The applicant argues that the newly amended independent claims 23, 34 now explicitly recite "a corresponding abnormal condition type" which is used in conjunction with the abnormal condition removal

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information to determine as to whether or not a corresponding abnormal condition should be removed, therefore is no longer anticipated by the Martin et al. reference. However, the examiner disagrees with the applicant's argument and maintains the rejections for the following reasons.

Martin et al. specifically teaches in column 5, lines 44-47 that managed network device sends to the network management station SNMP linkUp and linkDown traps to indicate that a port on the device has gone up or down. SNMP linkDown and linkUp are traps predefined in the SNMP specification RFC 1157, where linkDown is a type of abnormal condition while linkUp is the corresponding abnormal condition removal information. The examiner would like to further point out that SNMP linkUp and linkDown are merely examples of SNMP traps. Many other device specific traps may be defined using MIB, as is also disclosed in Martin, column 5, line 50.

To further understand SNMP traps and MIBs for printing devices, the applicant is recommended to review the document IETF RFC 1759, "Printer MIB", in which many abnormal condition types are defined with a unique object ID for identification purpose, and the leading edge events and trailing edge events disclosed in section 2.2.13.4 correspond to the abnormal conditions and abnormal condition removals recited in the current application, respectively.

5. **Section 103 rejections of claims 1-4, 9-15, 20-22, 31, 32, 42 and 43** are maintained for the same reason as presented above regarding the section 102 rejections because the claims are similarly amended.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 23-26, 33, 34-37, 44** are rejected under 35 U.S.C. 102(e) as being anticipated by Martin et al., (U.S. Patent 7,016,955, hereinafter “**Martin**”), in view of IETF RFC 1157 “Simple Network Management Protocol (SNMP)”, hereinafter **RFC 1157**.

As per independent claim 23, Martin teaches a management apparatus (column 4, line 44-49, where the network includes a network management station) for remotely managing a plurality of predetermined managed apparatuses (column 4, line 45, where a plurality of managed network devices is disclosed) over a computer network, each of the managed apparatuses including an abnormal condition reporting unit for reporting to the management apparatus abnormal condition information including a corresponding abnormal condition type on an abnormal condition that is detected in the managed apparatus (column 4, line 59, an SNMP agent on the managed device is used as an abnormal condition reporting unit to report to the management station the abnormal conditions such as “Configuration Start”, “Warm/Cold Start Trap”, “IP Ping Stop” and “LinkDown Trap”, see column 7 line 58-67. According to RFC 1157, each SNMP trap inherently carries a trap type) and an abnormal condition removal reporting unit for reporting to the management apparatus abnormal condition removal information if the detected abnormal condition has been removed in the managed apparatus (column 4, line 59, the

SNMP agent on the managed device also functions as a reporting unit to report to the management device abnormal condition removal information such as “Configuration Finish”, “IP Ping Stop” and “Link Up”, see column 8, line 8-12, “Concluding events”), a corresponding one of the managed apparatus that is transmitting the abnormal condition removal information defining an originating managed apparatus, comprising:

- a communication unit (column 4, line 57-58, an SNMP manager in the management station is the communication unit) for communicating with the managed apparatuses for receiving the abnormal condition information and the abnormal condition removal information;

- an abnormal condition information management unit (column 4, line 64-67, the network management software application processes the abnormal condition information such as “IP Ping Stop”, “Warm/Cold Start Trap” and “Link Down”) connected to said communication unit for storing and managing the abnormal condition information including a corresponding abnormal condition type that is received from the managed apparatuses; and

- an abnormal condition removal determination unit (column 4 line 64-67 and column 5 line 1-19, the network management software application is also the determination unit that processes abnormal condition removal information such as “IP Ping Start” and “Link Up”) connected to said abnormal condition information management unit and said communication unit for determining whether or not the abnormal condition has been removed from the managed apparatus based upon the abnormal condition removal information and the stored abnormal abnormal condition information.

As per independent claim 34, Martin teaches a remote management system for managing devices over a computer network, comprising:

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a plurality of predetermined managed apparatuses (column 4, line 45, a plurality of managed network devices are managed), each of the managed apparatuses further comprising:

a first communication unit (column 4, line 58-60, the SNMP agent is the communication unit that sends MIB data to the SNMP manager in the network management station) for communicating with a management apparatus;

a detection unit for detecting an abnormal condition within the managed apparatus (column 4, line 58-60, each managed device monitors operational characteristics of the network, so the managed device inherently has a detection unit);

an abnormal condition reporting unit (column 4, line 58-60, the SNMP agent receives abnormal condition form the detection unit and reports it to the SNMP manager in the management station) connected to said first communication unit for reporting abnormal condition information including a corresponding abnormal condition type (Martin teaches using SNMP; according to RFC 1157, the SNMP specification, each SNMP trap inherently carries a trap type) on the detected abnormal condition; and

an abnormal condition removal reporting unit (column 4, line 58-60, the same SNMP agent also processes and reports abnormal condition removal information) connected to said first communication unit for reporting abnormal condition removal information if the detected abnormal condition has been removed in the managed apparatus, a corresponding one of the managed apparatus that is transmitting the abnormal condition removal information defining an originating managed apparatus;

the management apparatus comprising:

a second communication unit (column 4, line 58-63, the SNMP manager in the network management station is a communication unit) for communicating with the managed apparatuses for receiving the abnormal condition information and the abnormal condition removal information;

an abnormal condition information management unit (column 4, line 64-65, the network management software application manages abnormal condition information) connected to said second communication unit for storing and managing the abnormal condition information including a corresponding abnormal condition type that is received from the managed apparatuses; and

an abnormal condition removal determination unit (column 4, line 64-65, the network management software application manages the abnormal condition removal information”) connected to said abnormal condition information management unit and said second communication unit for determining whether or not the abnormal condition has been removed from the managed apparatus based upon the abnormal condition removal information and the stored abnormal condition information (as disclosed in the section “Response to Arguments” above, Martin teaches that the abnormal condition removal information corresponds to the abnormal condition information).

As per claims 24 and 35, Martin teaches a method of communicating, a computer program performing the tasks of communicating, a management apparatus and a remote management system according to claims 23 and 34 respectively, wherein the abnormal condition information is distinct for each of the managed devices (In column 4, line 52-58, the network management station uses the SNMP protocol to communicate with the managed devices. It is

inherent in SNMP that the MIB data transported by SNMP is distinct for each device because it contains a unique identifier for every managed device. See IETF RFC-1157, “A Simple Network Management Protocol (SNMP)”), and said abnormal condition information being stored and managed for each of the managed devices at the management device (column 5, line 9-16, where the network management application processes received data, generates events and stores them in memory).

As per claims 25 and 36, Martin teaches a method of communicating, a computer program performing the tasks of communicating, a management apparatus and a remote management system according to claims 24 and 35 respectively, wherein the abnormal condition includes a plurality of abnormal condition types (column 7, line 8-42 discloses a plurality of abnormal condition types such as “Configuration Start”, “IP Ping Stop” and “Link Down”).

As per claims 26 and 37, Martin teaches a method of communicating, a computer program performing the tasks of communicating, a management apparatus, and a remote management system according to claims 23 and 34 respectively, wherein the abnormal condition removal call indicates the removal of all of the abnormal conditions at a single one of the managed devices (column 8, line 8-12, where “IP Ping Start” indicates removal of the abnormal condition “IP Ping Stop”, as well as the removal of all other side effect events such as “Link Down”).

As per claims 33 and 44, Martin teaches the management apparatus and a remote management system according to claims 23 and 34 respectively, wherein the abnormal condition information, the abnormal condition removal call and the power activation report are written in a predetermined structured language (column 4, line 58-63, Martin teaches that SNMP is used as

the communication protocol between the managed device and the management device. It is inherent in SNMP that MIB data is written in ASN.1 format, which is a predetermined structured language.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. **Claims 1-4, 9-11, 12-15, 20-22, 31-32, 42-43** are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Stevenson et al (U.S. Publication 2002/0143917, hereinafter “**Stevenson**”). Note that Stevenson is incorporated by reference into Martin.

As per independent claims 1 and 12, Martin teaches a method of communicating and a computer program performing the tasks of communicating, comprising the steps of:

detecting one of a predetermined set of abnormal conditions at a plurality of managed devices (column 5, lines 44-47 that managed network device sends to the network management

station SNMP linkUp and linkDown traps to indicate that a port on the device has gone up or down. SNMP linkDown and linkUp are traps predefined in the SNMP specification RFC 1157, where linkDown is a type of abnormal condition while linkUp is the corresponding abnormal condition removal information) .

transmitting abnormal condition information including a corresponding abnormal condition type on the detected abnormal condition from the managed device to the management device (column 5, line 6-8 and column 5 line 39-58 discloses that the managed devices detect and send to the management station SNMP Traps to indicate abnormal conditions on the devices);

receiving the abnormal condition information at the management device to store and manage the received abnormal condition information (column 4, line 52-57, where the network management station communicates with the managed network devices to receive abnormal condition information);

detecting removal of the previously detected abnormal condition (column 8, line 30-43, where a “Link Up Trap” indicates that the previous abnormal condition of “Link Down” has been removed) from a corresponding one of the managed devices the corresponding managed device defining an originating managed device;

transmitting from the managed device to the management device an abnormal condition removal call corresponding to the previously detected abnormal condition;

receiving the abnormal condition removal call at the management device (column 4, line 52-57, where the network management station communicates with the managed network devices to receive abnormal condition removal information);

Martin fails to teach the claim limitation of deleting a corresponding one of the abnormal condition information stored at the management device based upon the received abnormal condition removal call and the stored abnormal condition information.

However, Martin does teach about logging the abnormal condition removal call into the event list so that the network administrator knows that the corresponding abnormal condition has been resolved ((column 8, line 8-12, where the “concluding events” are the abnormal condition removal information, and column 11, line 7-13, where the program ensures that when the most relevant event is resolved or concluded, an event is additionally entered to show this to the user.”).

It would have been obvious to one of ordinary skill in the art at the time of the invention that the difference between the applicant’s teaching and Martin’s teaching is merely a matter of design choice that produces the same predictable result, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. *KSR International Co. v. Teleflex Inc.*, 550 U.S.--, 82 USPQ2d 1385 (2007).

As per claims 2, 13, Martin teaches a method of communicating, a computer program performing the tasks of communicating, a management apparatus and a remote management system according to claims 1 and 12 respectively, wherein the abnormal condition information is distinct for each of the managed devices (column 4, line 52-58, it is inherent in SNMP that MIB data transported by SNMP is distinct for each device because it contains a unique identifier for every managed device. See IETF RFC-1157, “A Simple Network Management Protocol (SNMP)”), and the abnormal condition information is stored and managed for each of the

managed devices at the management device (column 5, line 9-16, the network management application processes the received data, generates and logs events in memory).

As per claims 3, 14, Martin teaches a method of communicating, a computer program performing the tasks of communicating according to claims 2 and 13 respectively, wherein the abnormal condition removal call being distinct for each of the abnormal condition types (Martin specifically teaches in column 5, lines 44-47 that managed network device sends to the network management station SNMP linkUp and linkDown traps to indicate that a port on the device has gone up or down. SNMP linkDown and linkUp are traps predefined in the SNMP specification RFC 1157, where linkDown is a type of abnormal condition while linkUp is the corresponding abnormal condition removal information. The examiner would like to further point out that SNMP linkUp and linkDown are merely examples of SNMP traps. Many other device specific traps may be defined using MIB, as is also disclosed in Martin, column 5, line 50. To further understand SNMP traps and MIBs for printing devices, the applicant is recommended to review the document IETF RFC 1759, "Printer MIB", in which many abnormal condition types are defined with a unique object ID for identification purpose, and the leading edge events and trailing edge events disclosed in section 2.2.13.4 correspond to the abnormal conditions and abnormal condition removals recited in the current application, respectively).

As per claims 4, 15, Martin teaches a method of communicating, a computer program performing the tasks of communicating, a management apparatus, and a remote management system according to claims 1 and 12 respectively, wherein the abnormal condition removal call indicates the removal of all of the abnormal conditions at a single one of the managed devices

(column 8, line 8-12, where “IP Ping Start” indicates removal of all side effect events such as “Warm/Cold Start Trap”, “IP Ping Stop” and “Link Down”).

As per claims 9 and 20, Martin teaches the method and the memory medium according to any one of claims 5, 6 and 8, and 16, 17 and 19 respectively, further comprising additional steps of:

storing user information for each of the managed devices at the management device (column 4, line 58-63, it is inherent in SNMP that the management device stores the user information such as destination address).

Martin fails to teach but Stevenson teaches:

determining the first predetermined amount of time t1 based upon the stored user information (page 4, paragraph 64, where the predefined time interval is dependent upon the monitored characteristic and the device).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin with Stevenson’s teaching of determining the time interval using the device information and monitored characteristic so that the timer values can be set based on the device/user information. One would have been motivated to modify as such in order to optimize the timer values for each user.

As per claims 10 and 21, Martin teaches the method and the memory medium according to any one of claims 6 and 8, and 17 and 19 respectively, further comprising additional steps of storing device information for each of the managed devices at the management device (column 4, line 58-63, it is inherent in SNMP that the management device stores the device information.).

Martin fails to teach but Stevenson teaches:

determining the second predetermined amount of time t2 based upon the stored device information (page 4 paragraph 64, where it is disclosed that the predefined time interval is dependent upon the monitored characteristic and the device).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin with Stevenson's teaching of determining the time interval using the device information and monitored characteristic so that the timer values can be set based on the device/user information. One would have been motivated to modify as such in order to optimize the timer values for the device.

As per claims 11 and 22, Martin teaches the method and the memory medium according to any one of claims 1 and 12 respectively, wherein the abnormal condition information, the abnormal condition removal call and the power activation report are written in a predetermined structured language (column 4, line 58-63, it is inherent in SNMP that MIB data is written in ASN.1 format, which is a predetermined structured language.).

As per claim 31 that is dependent on any one of claims 27, 28 and 30, and **claim 42** that is dependent on any one of claims 38, 39 and 41, Martin teaches:

the management apparatus and a remote management system further comprising a user information storing unit connected to said abnormal condition removal unit for storing user information for each of the managed apparatuses (column 4, line 58-63, it is inherent in SNMP that the management device stores the user information such as destination address.).

Martin fails to teach but Stevenson teaches:

determining the first predetermined amount of time t_1 based upon the stored user information (page 4, paragraph 64, where the predefined time interval is dependent upon the monitored characteristic and the device).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin with Stevenson's teaching of determining the time interval using the device information and monitored characteristic so that the timer values can be set based on the device/user information. One would have been motivated to modify as such in order to optimize the timer values for each user.

As per claim 32 that is dependent on any one of claims 28 and 30, and **per claim 43** that is dependent on any one of claims 39 and 41, Martin teaches:

the management apparatus and a remote management system further comprising: a device information storing unit (column 4, line 38-41, the network management station includes a memory and a disk drive for storage purposes) connected to said abnormal condition removal determination unit for storing device information for each of the managed apparatuses (column 4, line 58-63, it is inherent in SNMP that the management device stores the device information.).

Martin fails to teach but Stevenson teaches:

said abnormal condition removal determination unit determining the second predetermined amount of time t_2 based upon the stored device information (page 4 paragraph 64, where it is disclosed that the predefined time interval is dependent upon the monitored characteristic and the device).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin with Stevenson's teaching of determining the time interval using the

device information and monitored characteristic so that the timer values can be set based on the device/user information. One would have been motivated to modify as such in order to optimize the timer values for each device.

8. **Claims 5-8, 16-19, 27-30, 38-41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin and Stevenson as applied to claims 1 and 12, and over Martin as applied to claims 23 and 34, further in view of Lovy et al. (U.S. patent 7,197,561, hereinafter “**Lovy**”).

As per claims 5 and 16, Martin teaches a method and a computer program performing the tasks of communicating according to claims 1 and 12 respectively, further comprising an additional step of notifying a center operator of the detected abnormal condition (column 2 line 18-22, where the network management software applications inform the network administrator of any significant conditions that have occurred on the network) if the corresponding abnormal condition removal call has not been received within a first predetermined amount of time t1 since the reception of the abnormal condition information at the management device (Fig. 3, 104, upon receiving the abnormal condition “IP Ping Stop”, i.e. type 3 event, the management applications display the abnormal condition and start the TIMER T(300)).

In addition, Martin teaches that all causal events of type 1, 2, 3 are logged and displayed to report an abnormal condition of the managed device, and concluding events of type 1a and 3a are logged and displayed to report that the corresponding abnormal condition has been resolved.

Martin fails to specifically teach when a center operator is notified of the abnormal condition.

Lovy teaches about notifying the center operator of the abnormal condition if the abnormal condition removal call has not been received within the predefined amount of time (column 26, line 49-54, when a managed device is first reported down, the network appliance doesn't alert the end user until it waits a certain amount of time to confirm that the device remains down).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin's method of notification with the teaching of Lovy to notify the center operator if the abnormal condition removal call is not received within a predefined amount of time. One would have been motivated to modify Martin as such to gain the commonly understood benefit that an operator doesn't have to be notified of abnormal conditions that are not confirmed or can quickly resolve on its own.

As per claims 6 and 17, Martin teaches a method of communicating and a computer program performing the tasks of communicating according to claims 1 and 12 respectively, further comprising additional steps of:

 sending a power activation report from the originating managed device to the management device upon temporarily switching off a main power supply of the managed device for subsequent power activation (column 5, line 38-43, where the managed device may send "Warm/Cold Start Trap" to indicate that the it has rebooted after the abnormal condition "IP Ping Stop" is detected) prior to said detecting of the removal of the previously detected abnormal condition from the managed device (column 8 line 55-67, where the managed device sends abnormal condition removal call "IP Ping Start" to indicate that the abnormal condition "IP Ping Stop" is resolved);

receiving the power activation report at the management device (column 5, line 38-43);
and

notifying a center operator of the detected abnormal condition if the power activation report has been received within a first predetermined amount of time t_1 since the reception of the abnormal condition information at the management device (Fig. 3, 104, upon receiving the abnormal condition “IP Ping Stop”, i.e. type 3 event, the management applications log and display the abnormal condition and start the TIMER T(300)) and the corresponding abnormal condition removal call has not been received from the originating managed device within a second predetermined amount of time t_2 (Fig. 3, 104, where t_2 is equivalent to the time that remains in TIMER T(300) when the management applications receive “Warm/Cold Start Trap” is received) since the reception of the power activation report at the management device.

Martin fails to specifically teach when a center operator is notified of the abnormal condition.

Lovy teaches about notifying the center operator of the abnormal condition if the abnormal condition removal call has not been received within the predefined amount of time (column 26, line 49-54, when a managed device is first reported down, the network appliance doesn't alert the end user until it waits a certain amount of time to confirm that the device remains down).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin's method of notifying the center operator with the teaching of Lovy, such that the center operator is notified if the power activation report has been received within the predetermined time t_1 since the abnormal condition information is received, but the abnormal

condition removal call is not received after waiting a second predefined amount of time t_2 . One would have been motivated to modify Martin as such to gain the commonly understood benefit that a center operator doesn't have to be notified of abnormal conditions that are not confirmed, that can quickly resolve on its own or be resolved with a power reset of the managed device.

As per claims 7 and 18, Martin teaches a method of communicating and a computer program performing the tasks of communicating according to claim 1 and 12 respectively, further comprising additional steps of:

 sending a power activation report from the originating managed device to the management device upon temporarily switching off a main power supply of the managed device for subsequent power activation (column 5, line 38-43, where the managed device may send "Warm/Cold Start Trap" to indicate that the it has rebooted after the abnormal condition "IP Ping Stop" is detected) prior to said detecting of the removal of the previously detected abnormal condition from the managed device (column 8 line 55-67, where "IP Ping Start" is the abnormal condition removal call for "IP Ping Stop");

 receiving the power activation report at the management device (column 5, line 38-43);
and

 determining that the previously detected abnormal condition has not been removed by the temporarily switching off of the main power supply of the originating managed device if the corresponding abnormal condition removal call has not been received from the originating managed device within a second predetermined amount of time t_2 since the reception of the power activation report at the management device (Fig. 3, 104, where t_2 is equivalent to the time

that remains in TIMER T(300) when the management device receives the Warm/Cold Start Trap).

As per claims 8 and 19, Martin teaches a method of communicating and a computer program performing the tasks of communicating according to claims 7 and 18 respectively, wherein if the power activation report has been received within a first predetermined amount of time t1 since the reception of the abnormal condition information at the management apparatus (column 8 line 55-67, after the abnormal condition “IP Ping Stop” is detected, the management software application logs the event and starts the timer “TIMER T(300)” in Fig. 3, 104, then the managed device may send a “Warm/Cold Start Trap” to indicate that the device has rebooted), claims 8 and 19 further comprising an abnormal condition notifying unit for notifying a center operator of the detected abnormal condition (column 2 line 19-24, network management software application acts as the notifying unit for informing the network administrator of any significant conditions or events).

Martin fails to specifically teach when a center operator is notified.

Lovy teaches about notifying the center operator of the abnormal condition if the abnormal condition removal call has not been received within the predefined amount of time (column 26, line 49-54, when a managed device is first reported down, the network appliance doesn't alert the end user until it waits a certain amount of time to confirm that the device remains down).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin's method of notifying the center operator with Lovy's teaching, such that the center operator is notified if the power activation report has been received within the

predetermined time t_1 since the abnormal condition information is received, but the abnormal condition removal call is not received after waiting a second predefined amount of time t_2 . One would have been motivated to modify Martin as such to gain the commonly understood benefit that a center operator doesn't have to be notified of abnormal conditions that are not confirmed, or that can quickly resolve on its own or be resolved with a power reset of the managed device.

As per claims 27 and 38, Martin teaches the management apparatus and a remote management system according to claims 23 and 34 respectively, further comprising an abnormal condition notifying unit for notifying a center operator (column 2 line 18-22, where the network management software applications inform the network administrator of any significant conditions that have occurred on the network) of the detected abnormal condition when the corresponding abnormal condition removal call has not been received within a first predetermined amount of time t_1 since the reception of the abnormal condition information at the management apparatus (Fig. 3, 104, upon receiving the abnormal condition "IP Ping Stop", i.e. type 3 event, the management applications log and display the abnormal condition and starts the TIMER T(300)).

Martin fails to specifically teach when a center operator is notified of the abnormal condition.

Lovy teaches about notifying the center operator of the abnormal condition if the abnormal condition removal call has not been received within the predefined amount of time (column 26, line 49-54, when a managed device is first reported down, the network appliance doesn't alert the end user until it waits a certain amount of time to confirm that the device remains down).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin's method of notifying the center operator with the teaching of Lovy to notify the center operator if the abnormal condition removal call is not received after waiting a predefined amount of time. One would have been motivated to modify Martin as such to gain the commonly understood benefit that an operator doesn't have to be notified of abnormal conditions that are not confirmed or can quickly resolve on its own.

As per claims 28 and 39, Martin teaches the management apparatus and a remote management system according to claims 23 and 34 respectively, wherein said communication unit receives a power activation report (column 5, line 38-43, the managed device sends a "Warm/Cold Start Trap" to indicate that it has rebooted) at the management apparatus from the originating managed apparatus after a main power supply of the originating managed apparatus had been temporarily switched off for subsequent power activation prior to receiving the abnormal condition removal information, the system further comprising:

an abnormal condition notifying unit for notifying a center operator of the detected abnormal condition (column 2 line 19-24, network management software application is the notifying unit for notifying the network administrator of any significant conditions or events) if the power activation report has been received within a first predetermined amount of time t_1 since the reception of the abnormal condition information at the management apparatus (Fig. 3, 104, upon receiving the abnormal condition "IP Ping Stop", i.e. type 3 event, the management applications log and display the abnormal condition and start the TIMER T(300)) and the corresponding abnormal condition removal information (column 8 line 55-67, "IP Ping Start") has not been received from the originating managed apparatus within a second predetermined

amount of time t_2 (Fig. 3, 104, where t_2 is equivalent to the time that remains in TIMER T(300) after the “Warm/Cold Start Trap” is received) since the reception of the power activation report at the management apparatus.

Martin fails to specifically teach when a center operator is notified of the abnormal condition.

Lovy teaches about notifying the center operator of the abnormal condition if the abnormal condition removal call has not been received within the predefined amount of time (column 26, line 49-54, when a managed device is first reported down, the network appliance doesn't alert the end user until it waits a certain amount of time to confirm that the device remains down).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin's method of notification with the teaching of Lovy, such that the center operator is notified if the power activation report has been received within the predetermined time t_1 since the abnormal condition information is received, but the abnormal condition removal call is not received after waiting a second predefined amount of time t_2 . One would have been motivated to modify Martin as such to gain the commonly understood benefit that a center operator doesn't have to be notified of abnormal conditions that are not confirmed, or that can quickly resolve on its own or be resolved with a power reset of the managed device.

As per claims 29 and 40, Martin teaches the management apparatus and a remote management system according to claims 23 and 34 respectively, wherein said communication unit receives a power activation report at the management apparatus from the originating managed apparatus after a main power supply of the originating managed apparatus had been

temporarily switched off for subsequent power activation (column 5, line 38-43, where the managed device may send a “Warm/Cold Start Trap” to indicate that the it has rebooted after the abnormal condition “IP Ping Stop” is detected) prior to receiving the abnormal condition removal information, said abnormal condition removal determination unit determining that the previously detected abnormal condition has not been removed by the temporarily switching off of the main power supply of the originating managed apparatus if the corresponding abnormal condition removal information has not been received from the originating managed apparatus within a second predetermined amount of time t_2 (Fig. 3, 104, where t_2 is equivalent to the time that remains in TIMER T(300) when the “Warm/Cold Start Trap” is received) since the reception of the power activation report at the management apparatus.

As per claims 30 and 41, Martin teaches the management apparatus and a remote management system according to claims 29 and 40 respectively wherein if the power activation report has been received within a first predetermined amount of time t_1 since the reception of the abnormal condition information at the management apparatus (column 8 line 55-67, where after the abnormal condition “IP Ping Stop” is detected, the management device logs the event and starts the timer “TIMER T(300)” in Fig. 3, 104, then the managed device may send a “Warm/Cold Start Trap” to indicate that the device has rebooted.), claims 30 and 41 further comprising an abnormal condition notifying unit for notifying a center operator of the detected abnormal condition (column 2 line 19-24, network management software applications are used to notify the network administrator of any significant conditions or events).

Martin fails to specifically teach when a center operator is notified of the abnormal condition.

Lovy teaches about notifying the center operator of the abnormal condition if the abnormal condition removal call has not been received within the predefined amount of time (column 26, line 49-54, when a managed device is first reported down, the network appliance doesn't alert the end user until it waits a certain amount of time to confirm that the device remains down).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin's method of notification with the teaching of Lovy to notify the center operator if the abnormal condition removal call is not received after waiting a predefined amount of time. One would have been motivated to modify Martin as such to gain the commonly understood benefit that an operator doesn't have to be notified of abnormal conditions that are not confirmed or can quickly resolve on its own.

Action is Final

9. **THIS ACTION IS FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIRLEY X. ZHANG whose telephone number is (571)270-5012. The examiner can normally be reached on Monday through Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4121
1/12/2007